

### AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A memory cell comprising:

a first electrode over a substrate;

a second electrode, wherein the first electrode and the second electrode provide electrical access to a memory cell body;

a silver chalcogenide layer disposed between the first electrode and the second electrode, where the silver chalcogenide layer forms a first portion of the memory cell body; and

a rigid chalcogenide glass layer, wherein the rigid chalcogenide glass layer is disposed between the first electrode and the second electrode and forms a second portion of the memory cell body, wherein the rigid chalcogenide glass comprises silver chalcogenide material from said silver chalcogenide layer in an amount such that a conductive pathway can form in said rigid chalcogenide glass layer in response to an electric potential applied between the first electrode and the second electrode.

2. (Previously Presented) The memory cell of Claim 1, wherein the silver chalcogenide layer is formed directly on the first electrode.

3. (Previously Presented) The memory cell of Claim 1, wherein the rigid chalcogenide glass layer is formed directly on the first electrode.

4. (Previously Presented) The memory cell of Claim 1, wherein the silver chalcogenide layer comprises silver selenide.

5. (Previously Presented) The memory cell of Claim 1, wherein the silver chalcogenide layer comprises silver sulfide.

6. (Previously Presented) The memory cell of Claim 1, wherein the silver chalcogenide layer comprises silver telluride.

7. (Previously Presented) The memory cell of Claim 1, wherein the silver chalcogenide layer comprises silver oxide.

8. (Previously Presented) The memory cell of Claim 1, wherein the rigid chalcogenide glass layer comprises germanium selenide ( $\text{Ge}_x\text{Se}_{(1-x)}$ ).

9. (Previously Presented) The memory cell of Claim 1, wherein the rigid chalcogenide glass layer comprises arsenic selenide ( $\text{As}_x\text{Se}_y$ ).

10. (Previously Presented) The memory cell of Claim 1, wherein the rigid chalcogenide glass layer comprises germanium sulfide ( $\text{Ge}_x\text{S}_{(1-x)}$ ).

11. (Previously Presented) The memory cell of Claim 1, wherein the rigid chalcogenide glass layer comprises selenium and can be doped with silver, but remain an amorphous material.

12. (Previously Presented) The memory cell of Claim 1, further comprising a silver layer disposed between the first electrode and the second electrode, wherein said silver layer forms a third portion of said memory cell body.

13. (Previously Presented) The memory cell of Claim 1, wherein at least one of the first electrode and the second electrode comprises tungsten (W).